

MANCHESTER'S ENVIRONMENTAL CHALLENGE

Background

As part of an innovative agreement reached in March 1999 to reduce sewer overflows into the Merrimack and Piscataquog rivers, the city will undertake \$52.4 million in projects to eliminate the majority of sewer overflows. The city will also undertake \$5.6 million in supplemental environmental projects to benefit the city's environment. This includes \$2 million for land preservation; \$1 million to restore urban ponds; \$1 million to stabilize streambanks, \$1 million to reduce stormwater pollution; \$500,000 to reduce health threats to children; and \$100,000 for environmental education. This status report updates the activities of these supplemental environmental projects.

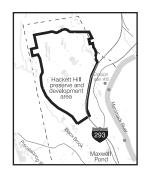
Urban Pond Restoration

We know a lot more now about the status of the City's ponds thanks to a 34-page report with 28 pages of data attached. The report is the Manchester Urban Ponds Restoration Program: Year 1 Report. It was completed in March 2001 by Art Grindle, the City's Urban Pond Coordinator. Art did an excellent job of describing the history, shoreline survey findings, water quality, and recommendations needed for restoration for each of the seven ponds being studied under the SEPP. These are Crystal Lake, Dorrs Pond, Maxwell Pond, McQuesten Pond, Nutts Pond, Pine Island Pond and Stevens Pond. Art and his volunteers will continue to collect data each year. This year with the help of NH DES, sediment from each of the ponds was sampled for a variety of metals and toxics - this was the first sampling of its kind in the state and will provide information about what is settling to the bottom of the City's ponds (with implications statewide) - so stay tuned.

When Art is not out with his volunteers collecting data he is busy making things happen. He is working to get a stormwater treatment system installed later this year upstream of Dorrs Pond, and planning a runoff treatment project to better drain the beach parking lot at Crystal Lake. But Art also knows how to have fun. Art and Vic Hyman, Recycling Coordinator for the City, planned and held the first Annual Manchester Ponds and Earth Day event on June 23, 2001 at Livingston Park. Mayor Robert Baines and Senator Bob Smith both spoke at the event. An estimated 600 - 1000 people braved the rainy weather and attended the event to enjoy the booths, activities and live music.

Land Preservation - Hackett Hill

On April 25, 2001 Governor Jeanne Shaheen, former NHDES Commissioner Bob Varney, Manchester's Mayor Robert Baines, The Nature Conservancy's Director Daryl Burtnett, and EPA's Carl Deloi were "on the hill." Hackett Hill that is, in the northwest corner of the City, to celebrate the City's turning over the 350-acre ecological preserve to the Nature Conservancy. "This site is incredible for its ecological signifi-



cance and also because it lies within the borders of the state's largest city," noted Governor Shaheen. "It is a treasure that will now be preserved in perpetuity for the people of Manchester and the State of New Hampshire." The Nature Conservancy is developing a stewardship and management plan and has begun trail design for the property. The City is also continuing negotiations for the purchase of 283 adjacent acres to increase the amount of protected land around the Preserve. To help with this purchase, the City has been granted \$75,000 from the State's Land and Community Heritage Investment Program.

Streambank Stabilization and Erosion Control

We are waiting to see if they take root. What? You may ask. About 1500 stabilizing plantings that were provided to attendees of the first streambank restoration workshop held at Amoskeag Fishways on May 26th, 2001. Approximately 30 residents of Manchester attended the streambank restoration training and went home with a package of plants to plant on their streambanks to stabilize the bank and reduce erosion. Katie Hughes, who prepared the Merrimack River Streambank Inventory Report while working as an Americorps member last year has been brought back to work on the project through the auspices of the Amoskeag Fishways and the New Hampshire Audubon Society. She is currently revisiting some of the 33 problem sites that were identified in the original inventory and will be developing restoration plans for priority sites. Katie is also involved with the educational portion of the SEPP and is working with eighth grade teachers to implement the new environmental curriculum.







Health Risk Reduction for Children

Dr. Rosemary Caron, a toxicologist hired through the SEPP, continues to collaborate with the NHDES to conduct an air quality monitoring project at Beech Street School, in an effort to get a better understanding on the causes of asthma. Additionally, the school nurse has been trained to use an air canister to sample the indoor air when numerous asthma incidents are observed in a given period of time. Dr. Caron also plans to analyze data related to inpatient hospital and emergency room asthma admissions for Manchester residents.

In regards to lead poisoning, Dr. Caron has published an article in the Centers for Disease Control and Prevention's publication, Mortality Weekly Report, regarding a child lead poisoning fatality that occurred in Manchester last year. The article can be found at www.cdc.gov/mmwr/ and is entitled, "Fatal Pediatric Lead Poisoning- New Hampshire, 2000".

Dr. Caron has prepared fact sheets on the West Nile Virus, available on the Manchester Health Department web site, http://eol.grolen.com/manch. Dr. Caron has also been part of a task force at the Manchester Health Department that has developed an action plan to monitor for the West Nile Virus in the City.

Dr. Caron is also involved in an initiative to reduce cardiovascular disease risk factors in Manchester residents, by targeting health behavior interventions, such as proper nutrition and physical activity, towards an elementary school age population.

As part of the SEPP agreement, \$50,000 in grant funds are available each year from the Health Department to address health issues in the City. A renewal application process is currently underway for the next funding cycle. Please contact Dr. Rosemary Caron at the Manchester Health Department for more information at (603) 624-6466 x 317.

Stormwater Management

A critical part of the CSO Agreement is the \$1million set aside for control of polluted runoff and stormwater. The city will be implementing a stormwater management plan. This includes removal of illicit sewer connections, street sweeping/catch basin cleaning, and educating the public. The City has selected Malcolm Pirnie, an engineering consulting firm to work on these tasks. M.P. has also reviewed the Streambank Inventory Report and identified 5 outfalls for screening and sampling at the ponds, and 7 outfalls for screening and sampling on the Merrimack River. Another consultant for the City, Camp Dresser & McKee has recently completed mapping the City's stormwater system. This helps the City know where the water goes when in rains, where the pipes are filling up too fast and where there is excess capacity to better manage the stormwater.

Project Contacts

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Environmental Education

The Merrimack River MATTERS curriculum is being implemented and as a result eighth grade students are getting their feet wet and hands dirty. Students from Parkside School were out on the Piscataquog River collecting aquatic macroinvertebrates (bugs that live in water), doing water quality analysis, and learning about the CSO project at Kelly Street. Students from Hillside were doing a clean up, water testing, macroinvertebrate sampling and plantings at Ray Brook and Dorrs Pond. Students from Southside created children's books about the Merrimack River and the students at McLaughlin identified trees and shrubs near the school. This is all getting done thanks to the hard work of the teachers involved and the work of Katie Hughes (Amoskeag Fishways) and Beth Brazil of the Merrimack River Watershed Council (MRWC). The MRWC recently received a \$10,500 grant from EPA-New England to continue to implement the curriculum. Teachers and students from Parkside and Southside received awards from the Manchester Conservation Commission for their environmental work this year.

Related News

Steve Landry of the NH DES is working with Art Grindle, Jim McCartney of Trout Unlimited and the Wakefield Materials concrete company to consider a stream restoration project to restore Black Brook to its original location and address pollution problems in the area. Black Brook drains into Maxwell Pond on the west side of the City off Front Street.

Cyndy Carlson of Camp Dresser and McKee, the primary consultant helping the City implement the SEPP in Manchester, received an Individual Environmental Merit Award from EPA-New England at a ceremony in Fanueil Hall in Boston on April 18, 2001. Cyndy was one of twelve individuals recognized in the New England region. She was recognized for her work on the SEPP and the numerous volunteer activities she is involved with in the City. Cyndy is a resident of Manchester.

Mary Tebo at UNH Cooperative Extension and others have applied for a \$160,000 grant from HUD to do neighborhood revitalization efforts such as community gardening, millyard landscape revitalization and neighborhood greenspace projects. She will hear in October if it is accepted. Many of the projects she is pursuing would link to projects underway as part of the SEPP. Lets wish her luck!

Barry Wicklow and his students from St. Anselm's College have been helping to restore wild lupine plants near the Piscataquog River.

Interested in getting involved with Manchester's Environmental Challenge? Let us know. Call the Hotline at (603) 665-6812 or email at environment@mail.com. We welcome businesses, universities, scout troops, churches, anyone to get involved and be part of helping improve Manchester's environment.